What is claimed is:

1. A highly filled polyolefin compound, the preparation of which uses maleic-anhydride-modified polyolefin and at least one amino-functional silicon compound.

2. The highly filled compound as claimed in claim 1, the preparation of which is based on starting materials from the following series
   (i) polypropylene (PP) or polyethylene (PE),
   (ii) maleic-anhydride-modified polypropylene or maleic-anhydride-modified polyethylene,
   (iii) filler,
   (iv) at least one aminosilane and/or aminosiloxane, and
   (v) where appropriate, stabilizers and processing aids.

3. The highly filled compound as claimed in claim 1 or 2,
   wherein
   the proportion of component (ii) is from 0.1 to 10 parts by weight, based on the entire polymer content.

4. The highly filled compound as claimed in any of claims 1 to 3,
   wherein
   metal powders, metal oxides, metal hydroxides, and/or biomaterials are present as fillers.

5. The highly filled compound as claimed in claim 4,
   wherein
   magnesium hydroxide, silicon dioxide, silicates, organoclays, aluminum hydroxide, antimony oxide, calcium carbonate, wood, natural fibers, or biodegradable fillers are present.

6. The highly filled compound as claimed in any of claims 1 to 5,
   wherein

the filler content is from 30 to 85% by weight, based on the compound.

7. The highly filled compound as claimed in any of claims 1 to 6, wherein the content of component (iv) is from 0.01 to 5% by weight, based on the compound.

8. The highly filled compound as claimed in any of claims 1 to 7, wherein at least one amino-functional silicon compound is present from the following series:

a) aminosilane of the general formula I

$$R^1\text{-}Si(CH_3)_x(Z)_{3-x} \qquad (I),$$

where the groups Z are identical or different and Z is an alkoxy group having from 1 to 4 carbon atoms, x is 0 or 1, and R^1 is an amino group of the formula $H_2N\text{-}[(CH_2)_2NH]_y\text{-}(CH_2)_3\text{-}$, where y is 0 or 1 or 2,

b) aminosilane of the general formula II

$$R^2_{(2-v)}NH_v\text{-}(CH_2)_3\text{-}Si(CH_3)_x(Z)_{3-x} \qquad (II),$$

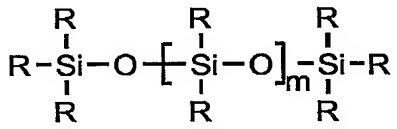
where the groups Z are identical or different and Z is an alkoxy group having from 1 to 4 carbon atoms, x and v, independently, are 0 or 1, the groups R^2 are identical or different, and R^2 is a linear, cyclic, or branched alkyl group having from 1 to 20 carbon atoms or an aryl group having from 6 to 12 carbon atoms,

c) bisaminosilane of the general formula (III)

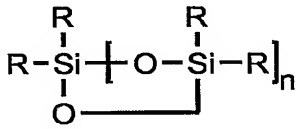
$$(Z)_3Si(CH_2)_3[NH(CH_2)_2]_wNH[(CH_2)_2NH]_z(CH_2)_3Si(Z)_3 \qquad (III),$$

where the groups Z are identical or different and Z is an alkoxy group having from 1 to 4 carbon atoms, and w and z, independently of one another, are 0, 1 or 2,

d) aminosiloxane oligomers of the general formulae (IV) and (V),



(IV)



(V)

where the substituents R are composed of

- aminopropyl-functional groups of the formula $-(CH_2)_3-NH_2$ or $-(CH_2)_3-NHR'$ or $-(CH_2)_3-NH(CH_2)_2-NH_2$ or $-(CH_2)_3-NH(CH_2)_2-NH(CH_2)_2-NH_2$, where R' is a linear, branched, or cyclic alkyl group having from 1 to 18 carbon atoms, or an aryl group having from 6 to 12 carbon atoms, and
- methoxy, ethoxy and/or propoxy groups, and
- where appropriate, alkyl, alkenyl, isoalkyl or cycloalkyl groups having from 1 to 18 carbon atoms, and/or aryl groups having from 6 to 12 carbon atoms,

where at most one aminopropyl-functional group has bonding to a silicon atom and the degree of oligomerization for compounds of the general formula IV is in the range $2 \leq m \leq 30$, and that for compounds of the general formula V is $3 \leq n \leq 16$,

e) a mixture composed of at least two of the abovementioned amino-functional silicon compounds,

or

f) a mixture of at least one amino-functional silicon compound with at least one vinyl silane and/or alkyl silane.

9. A process for preparing a polyolefin compound as claimed in any of claims 1 to 8,
which comprises
(A) combining components (i), (ii), (iii), (iv) and, where appropriate, (v) in a heated mixing assembly with extrusion apparatus, mixing these, extruding the melt, and obtaining pellets,
or
(B) first coating or mixing component (iii) with component (iv) in a stirred tank, and also combining components (i) and (ii) and also, where appropriate, (v), in a heated mixing assembly with extrusion apparatus, and mixing these, and then adding the mixture of components (iii) and (iv) produced in the reactor to, and incorporating it into, the polymer mixture, extruding the melt, and obtaining the pellets.

10. A polyolefin compound obtainable as claimed in claim 9.

11. The use of at least one amino-functional silicon compound as claimed in any of claims 1 to 10 for preparing highly filled polyolefin compounds.

12. The use of highly filled polyolefin compounds as claimed in any of claims 1 to 8 or of a compound obtained as claimed in claim 9 or 10 for producing polyolefin moldings.

13. The use of a polyolefin compound as claimed in any of claims 1 to 12 for producing flame-retardant compounds for cables.

14. An item whose production is based on a polyolefin compound as claimed in any of claims 1 to 13.